

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

31780

7590

09/24/2003

ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165 EXAMINER

SARKAR, ASOK K

ART UNIT

CLASS-SUBCLASS

2829

438-487000

DATE MAILED: 09/24/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,466	10/31/2000	Shunpei Yamazaki	0756-2222	8851

TITLE OF INVENTION: METHOD FOR FABRICATING A SEMICONDUCTOR DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	12/24/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

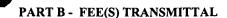
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

 Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

31780

7590

09/24/2003

ERIC ROBINSON **PMB 955** 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165 Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

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(Depositor's nam		
(Signatur		
(Dat		

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699.466	10/31/2000	Shunnei Yamazaki	0756-2222	8851

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nonprovisional	NO	\$1300)	\$0	\$1300	12/24/2003	
EXA	EXAMINER SARKAR, ASOK K		IIT TIE	CLASS-SUBCLASS			
SARKA				438-487000			
CFR 1.363). Change of correspond Address form PTO/SB/	dence address or indication of "F dence address (or Change of (122) attached. tion (or "Fee Address" Indica or more recent) attached. Us	Correspondence	names of agents OR firm (havin agent) and	ting on the patent front p up to 3 registered pater, alternatively, (2) the na- ng as a member a registe the names of up to 2 re- or agents. If no name is lated.	nt attorneys or 1ne of a single red attorney or 2egistered patent		
PLEASE NOTE: Unles been previously submitt (A) NAME OF ASSIGN				r on the patent. Inclusion Completion of this form is E: (CITY and STATE OR	of assignee data is only appropri NOT a substitute for filing an ass COUNTRY)	ate when an assignment has ignment.	
Please check the appropria	te assignee category or catego	ories (will not be pr	inted on the pa	atent); 🗖 individual	Corporation or other private g	roup entity 🚨 governmen	
4a. The following fee(s) are	e enclosed:	4b	o. Payment of l	Fee(s):			
☐ Issue Fee			A check in	the amount of the fee(s) is	s enclosed.		
☐ Publication Fee				☐ Payment by credit card. Form PTO-2038 is attached.			
☐ Advance Order - # of Copies			☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).				
Director for Patents is requ	ested to apply the Issue Fee a	nd Publication Fee	(if any) or to	re-apply any previously pa	aid issue fee to the application ide	entified above.	
(Authorized Signature)		(Date)					

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION N	O. F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/699,466	09/699,466 10/31/2000		Shunpei Yamazaki	0756-2222	8851		
31780	7590	09/24/2003		EXAM	EXAMINER		
ERIC ROBI	NSON			SARKAR, ASOK K			
PMB 955 21010 SOUT	HBANK ST	•		ART UNIT	PAPER NUMBER		
POTOMAC FALLS, VA 20165				2829			
				DATE MAILED: 09/24/200	3		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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09/699,466	09/699,466 10/31/2000 Shunpei Yamazaki 31780 7590 09/24/2003		0756-2222 8851			
31780			EXAM	EXAMINER		
ERIC ROBI	NSON		SARKAR	SARKAR, ASOK K		
PMB 955 21010 SOUT	HBANK ST			ART UNIT	PAPER NUMBER	
POTOMAC FALLS, VA 20165				2829		
				DATE MAILED: 09/24/200	3	

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2003. <u>See Revision of Patent Fees for Fiscal Year 2004</u>; <u>Final Rule</u>, 68 Fed. Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent,

except a design or plant patent:

By a small entity (Sec. 1.27(a))......\$665.00

By other than a small entity.....\$1,330.00

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

By a small entity (Sec. 1.27(a))...... \$320.00

By other than a small entity......\$640.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	PV
Nation of Allowahility	09/699,466	YAMAZAKI ET AL.	
. Notice of Allowability	Examiner	Art Unit	
	Asok K. Sarkar	2829	
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this apportant or other appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due o	d course. THIS
1. This communication is responsive to <i>Amendment filed 9/1</i> :	1/2003.		
2. X The allowed claim(s) is/are 1-3 and 35-61.			
3. A The drawings filed on 31 October 2000 are accepted by the	e Examiner.		
4. ☑ Acknowledgment is made of a claim for foreign priority und a) ☑ All b) ☐ Some* c) ☐ None of the:			
1. ☐ Certified copies of the priority documents have	been received.		
2. Certified copies of the priority documents have		8/784.290	
3. ☐ Copies of the certified copies of the priority doc International Bureau (PCT Rule 17.2(a)).			ion from the
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic priority ur		onal application).	
(a) The translation of the foreign language provisional a	- ·	•	
6. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. §§ 120 and/or 121.		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the submitted of the submi	this application. THIS THREE-MOI	NTH PERIOD IS NOT I	EXTENDABLE.
INFORMAL PATENT APPLICATION (PTO-152) which gives reas			01,02 01
 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No 	son's Patent Drawing Review (PTO	-948) attached	
(b) ☐ including changes required by the proposed drawing of	correction filed, which has b	een approved by the E	xaminer.
(c) including changes required by the attached Examiner	s Amendment / Comment or in the	Office action of Paper N	No
Identifying indicia such as the application number (see 37 CFR 1. each sheet.	.84(c)) should be written on the drawin	ngs in the front (not the	back) of
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T			ote the
Attachment(s)			
 1 □ Notice of References Cited (PTO-892) 3 □ Notice of Draftperson's Patent Drawing Review (PTO-948) 5 ☑ Information Disclosure Statements (PTO-1449), Paper No. 23 7 □ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4☐ Interview Summ <u>3</u> . 6☐ Examiner's Ame	al Patent Application (F ary (PTO-413), Paper I endment/Comment ement of Reasons for A	No

Application/Control Number: 09/699,466

Art Unit: 2829

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12, 2003 has been entered.

Response to Amendment

2. Applicant's explanation of the instant invention in pointing the difference with the cited prior art was found to be convincing to the Examiner. Additionally, Applicant's amendments of claims 1 – 3 and 35 - 45 corrects the problems noted in Paper No. 20, paragraphs 5 – 8 and accordingly, the rejection to claims 1 – 3 and 35 – 51 based on 35 U. S. C. 103 (a) and double patenting is withdrawn.

Allowable Subject Matter

- 3. Claims 1-3 and 35-61 are now allowed.
- 4. The following is an examiner's statement of reasons for allowance:

Claims 1- 3, 36 - 39, 41 - 45 and 52 - 61 recite, inter alia, a method of forming a semiconductor device comprising the step of performing a plasma treatment to the semiconductor island. The art of record does not disclose or anticipate the above limitation in combination with other claim elements nor would it be obvious to modify the art of record so as to form a device including the above limitation.

Page 2

Application/Control Number: 09/699,466

Art Unit: 2829

Claims 35 and 40 recite, inter alia, a method of forming a semiconductor device comprising the step of forming an interlayer insulating film over the gate electrode wherein the interlayer insulating film comprises silicon nitride and forming a resin material layer over the interlayer insulating film. The art of record does not disclose or anticipate the above limitation in combination with other claim elements nor would it be obvious to modify the art of record so as to form a device including the above limitation.

Conclusion

- 5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asok K. Sarkar whose telephone number is 703 308 2521. The examiner can normally be reached on Monday Friday (8 AM- 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 703 308 1233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Page 3

Art Unit: 2829

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 4918.

Asok K. Sarkar

September 22, 2003

WAMAND CUNEO
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800